

CLAIMS

1. A gas compressor (1, 11) having n stages (C₁, C₂, C₃, C₄, C₅, CA₁, CA₂, CA₃) connected in series, where n
5 is equal to at least 3, each stage being followed by a cooler (R₁, R₂, R₃, R₄, R₅, RA₁, RA₂, RA₃) characterized in that at least two coolers have different pressure drops for the compressed gas, the cooler having the lower pressure drop being upstream of
10 that having the higher pressure drop.

2. The compressor as claimed in claim 1, in which the cooler (R₅, RA₃) of the final stage of the compressor has a higher pressure drop than that of the first
15 stage.

3. The compressor as claimed in claim 2, having at least four stages, in which the final stages of the compressor have a higher pressure drop than the first
20 stages.

4. The compressor as claimed in one of the preceding claims, in which at least two coolers have pressure drops differing by at least 30%, or at least 50% or
25 even at least 100%, the cooler having the lower pressure drop being upstream of that having the higher pressure drop.

5. The compressor as claimed in claim 4, in which at least two coolers have pressure drops different by at least 100%, the cooler having the lower pressure drop being upstream of that having the higher pressure drop.
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6. A unit for separating a gas mixture, which includes at least one compressor (1, 11) as claimed in one of claims 1 to 5 and means for sending a gas (3, 9) coming from and/or intended for the unit to this
35 compressor.